

WHAT IS CLAIMED IS:

1. A method of removing a liquid from at least one surface of at least one substrate comprising the steps of:

5 subjecting said substrate to a rotary movement
 supplying a liquid on at least a part of said surface of said substrate; and
 locally heating said liquid on said part of said surface, while supplying said liquid.

10 2. A method as recited in claim 1, wherein, by supplying said liquid and by locally heating said liquid on said part of said surface of said substrate, at least locally a sharply defined liquid-ambient boundary is created.

15 3. A method as recited in claim 1, wherein said rotary movement is performed at a speed to guide said liquid-ambient boundary over said surface of said substrate.

20 4. A method as recited in claim 3, wherein said rotary movement is applied on a single substrate such that said substrate rotates around its own centre.

5. A method as in claim 4, wherein the rotation speed is in the range from 2 to 40 revolutions per second.

25 6. A method as recited in claim 1, wherein said heating is accomplished by means of dispensing a heated gas or a heated vapor or a heated mixture of a gas and a vapor.

7. A method as recited in claim 1, wherein said heating is accomplished by means of irradiation with an energetic beam.

30 8. A method as recited in claim 1, wherein said liquid is one of a group of an etching liquid, a cleaning liquid or a rinsing liquid.

9. A method as recited in claim 1, wherein said liquid is a dilute aqueous solution.

10. A method as recited in claim 8, wherein said cleaning liquid comprises a mixture of NH₄OH, H₂O₂ and H₂O; or comprises a mixture of HCl, H₂O₂ and H₂O; or comprises diluted HCl; or comprises a mixture comprising O₃.

5 11. A method as recited in claim 8, wherein said rinsing liquid comprises H₂O; or a mixture of H₂O and an acid, said mixture having a pH between 2 and 6.

12. A method of removing a liquid from a first surface and a second surface of at least one substrate comprising the steps of:

10 subjecting said substrate to a rotary movement

supplying a liquid on at least a part of said first side and at least a part of said second side of said substrate; and

locally heating said liquid on said part of said first surface and on said part of said second surface, while supplying said liquid, to thereby locally reduce the surface tension of said liquid.

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13. An apparatus for removing a liquid from at least one surface of at least one substrate, said apparatus comprising:

20 a substrate holder which is subjectable to a rotary movement, said substrate being releasably held by said substrate holder;

at least one liquid supply system for applying a liquid on at least a part of said surface of said substrate;

25 at least one heat source for locally heating said liquid; and

30 said heat source and said liquid supply system being positioned such that said heating is applied closer to the centre of said rotary movement of said substrate holder than said liquid.

14. An apparatus as recited in claim 13, further comprising a chamber wherein said substrate holder is positioned, said chamber being designed in a manner to avoid back splashing of said liquid on said surface of said substrate.

15. An apparatus as recited in claim 13, where said heating source comprises at least one nozzle for dispensing a heated gas, or a heated vapor or a heated mixture of a vapor and a gas on said surface of said substrate and said liquid supply system

comprises at least one nozzle for applying said liquid on said part of said surface of said substrate, said nozzles are positioned such that said heating is applied closer to the centre of the rotary movement of the substrate holder than said liquid.

5 16. An apparatus as recited in claim 15, where said nozzles are mounted on an arm, said arm being movable relative to said substrate holder.

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An apparatus as in claim 13, wherein said heat source is a source of radiant energy.